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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,367	10/14/2004	Antonie Dijkhof	NL 020314	8678

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BRIARCLIFF MANOR, NY 10510

EXAMINER

SUN, SCOTT C

ART UNIT	PAPER NUMBER
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2182

MAIL DATE	DELIVERY MODE
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06/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/511,367

Applicant(s)

DIJKHOF ET AL.

Examiner

Scott Sun

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/23/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. The term "substantially" in claims 1 and 8 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For the purpose of continuing prosecution, examiner interpreted the limitations "substantially empty" and "substantially equal" respectively as "empty" and "equal".

5. Claims 6 and 7 recite the limitation "said input data". There is insufficient antecedent basis for this limitation in the claim. For the purpose of continuing prosecution, examiner will interpret the limitation as "said output data".

6. Claim 8 recites in the preamble "means for receiving output data" and "means for adding and storing said output data". It is unclear if these means are part of the device being claimed or merely function with the device. It is also unclear if applicant intend for these structural features to be limiting. For the purpose of continuing examination, the structural features in the preamble will be interpreted as non-limiting and merely works with the device being claimed (i.e. not included in the device). Applicant is requested to state clearly what structural features in the preamble are included in the device, and

what structural features are to be limiting. The claim should be amended to unambiguously define the intended scope if any of the physical features are to be limiting. Also see above rejection under U.S.C. 112, 1st paragraph.

Claim 8 further recites "the means" in line 4. There is insufficient antecedent basis for this limitation in the claim.

7. Claims 2-5 are rejected because of their dependency on one or more of the above claims.

8. The following rejections are made based on the examiner's best interpretation of the claims in light of the 35 USC 112 rejections above.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 8-11 are rejected under 35 U.S.C. 101 because the claimed invention is software per se, and therefore is non-statutory subject matter. In light of the specification, the various elements being claimed can all be computer instructions (software-component of data source; pages 4-5). Examiner suggests modifying the preamble of claim 8 from "a device" to "a computer-readable storage medium containing computer-executable instructions" and "when executed performs the steps of:".

11. To expedite a complete examination of the instant application, the claim(s) rejected under 35 USC 101 (nonstatutory) above are further rejected as set forth below

in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al (US Patent #7,170,856) in view of Ribas-Corbera et al(Pub # US 2003/0053416).

14. Regarding claim 1, Ho discloses a method (figures 11 -13) of changing an output rate of information for a buffer (jitter buffer 600 in figure 6) with a constant first output rate (a constant bit rate, column 16, lines 50-53), where the buffer receives output data from a data source (CBR data sources 110 and 150, column 1, lines 15-20), and the output data is added to be stored in said buffer, characterized in that the method comprises the steps of:

Halting the reception of output data from the data source (flushing the jitter buffer when high threshold is reached, column 11, lines 64-66);

Outputting the stored output data of said buffer at said first output rate until said buffer is empty (column 12, lines 53-57);

Stopping outputting of the content of said buffer (waiting for data to accumulate up to low threshold; column 11, lines 6-9);

Resuming receiving and storing of said output data from the data source in said buffer when the buffer is substantially empty (re-accumulate data in buffer to be played when low threshold is reached; column 12, lines 51-56);

Setting a second constant output rate as the output rate of said buffer (increasing or decreasing bit rate, depending on if low or high threshold was reached; column 16, lines 25-57);

Ho does not disclose explicitly outputting at second output rate when the amount of buffered data is equal to the second constant output rate times a requested buffer-time. However, Ribas-Corbera teaches commencing output of the stored content of said buffer at said second output rate, when the amount of buffered data is substantially equal to the second constant output rate times a requested buffer-time (initial buffer fullness "F" is equal to buffer delay times transmission bit rate "R"). Teachings of Ho and Ribas-Corbera are from the same field of data buffering, and specifically multimedia data buffering, and specifically of buffer adjustment.

Therefore, it would have been obvious at the time of invention for a person of ordinary skill in the art to combine teachings of Ho and Ribas-Corbera by using the initial buffer amount calculation of Ribas-Corbera in the system of Ho for the benefit of dynamically and accurately adjusting to varying transmit conditions using relatively low bandwidth (paragraph 10, Ribas-Corbera).

15. Regarding claim 2, Ho and Ribas-Corbera combined disclose claim 1, and Ribas-Corbera further discloses wherein the data source specifies a second constant output

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rate and a requested buffer-time for said buffer (encoder sends data along with RBF parameters, "rate, buffer size, and initial fullness" to decoder, paragraph 8, 9).

16. Regarding claim 3, Ho and Ribas-Corbera combined disclose claim 1, and Ho further discloses wherein the resuming of said output data is initiated when the buffer is empty (column 11, lines 6-9).

17. Regarding claim 4, Ho and Ribas-Corbera combined disclose claim 1, and Ho further discloses wherein the data source is a software application adapted to receive and process input data and outputting of said output data (column 17, lines 34-36).

18. Regarding claim 5, Ho and Ribas-Corbera combined disclose claim 1, and Ho further discloses wherein the buffer is a hardware buffer (column 9, lines 48-49).

19. Regarding claim 6, Ho and Ribas-Corbera combined disclose claim 1, and Ho further discloses wherein the step of halting the reception for output data comprises discarding (flushing) said input data by said data source (column 11, lines 64-67).

20. Regarding claim 7, Ho and Ribas-Corbera combined disclose claim 1, and Ribas-Corbera further discloses wherein the input data are MPEG2 compliant elementary streams and the data source is adapted to multiplex the MPEG2 streams in to a transport stream (paragraph 2, 10).

21. Regarding claims 8-11, examiner notes that these claims are substantially similar to claims 1-4. The same grounds of rejection are applied.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Sun whose telephone number is (571) 272-2675. The examiner can normally be reached on M-F, 10:30am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS


KIM HUYNH
SUPERVISORY PATENT EXAMINER

5/29/07